

Novel Photosensor Concept – Spin Uniforming of Individual Photons According to Sub-Position

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Introduction

This concept is predicated upon an assumption that there will eventually be a method for extrapolating the frequency of a wave of photons from the energy level of a single photon. Provided such a mechanism, a this mechanism provides one possible avenue toward ascertaining the strike position of a single photon to within an accuracy of a few nanometers.

Abstract

Polarity (and therefore spin) uniforming materials may be used to create a series of nanoscopic cubicles which project forward of a primary sensor. There may be dozens or hundreds of these cubicles in a cluster each of which is configured to change the spin orientation of an individual photon without altering its frequency (or energy level, if you prefer.)

Each individual's photon's strike position can be assessed subsequently by a mechanism which measures the energy level of the individual photon as well as its spin orientation. Information concerning spin orientation is used assess strike position while energy level is determined through other means.

Conclusion

In this way, a single sensor node, regardless of its design, could be used to pinpoint the strike position of a photon with greater accuracy.